

# SPECIFICATION OF XIAOXIANG BULETOOTH APP

## 1. Introduction-----

The "Xiaoxiang" APP is an APP specially developed for lithium batteries independently developed by YCSTPOWER and his BMS supplier. The APP mainly displays: lithium battery voltage, current, capacity, temperature and other curves, charge and discharge switch control, SOC, battery voltage, charge and discharge current, protection status, basic parameters, etc., through the background permission operation, you can also control the lithium battery protection board. The parameter setting makes the health status of the lithium battery more transparent and ensures the safety of the use of the lithium battery. According to market feedback, the upgraded version of "Xiaoxiang" optimizes the overall interface, adopts a modular layout, and adds more parameters and function settings, just to bring users a faster, more complete and stronger experience status.

"XiaoXiang" APP can be installed on Android 5.0 and IOS 10.1 and above, and used on devices that support Bluetooth 4.0, and can only run after obtaining the permission to use Bluetooth and GPS.





Android

Scan the code to jump to the download address, and follow the instructions to complete the download and installation.

## 2. Function Introduction-----

Module	Function	Description	Example
	Voltage, current, remaining capacity,	Display the highest, lowest, average voltage,	The last 100 pieces of data, one per minute,
History	temperature	battery current, remaining capacity,Variation	graph
		curve of BMS temperature	
	Charge switch, discharge switch, automatic	Send commands through APP to control BMS	Control switch: on/off; automatic
	equalization switch, clear alarm, reset	board; clear alarm data; reset remaining	equalization switch, clear Alarm and reset
Control	capacity	capacity; open equalization	capacity are not displayed in some BMS
			versions
	SOC display diagram, estimated full time,		
	estimated discharge time, charge switch,		
	discharge switch, equilibrium state,	Dashboard, showing battery voltage, current,	Real-time data of battery static, charging and
	protection state, total voltage, current,	temperature, SOC, protection status,	discharging
Real Time	power, maximum voltage (single string),	differential pressure, cycle times and other	
	minimum voltage (single string), average	data	
	voltage, voltage difference , cycle times,		
	temperature, humidity, single string voltage		
	information		
		Display the basic information of the protection	Display the basic information of the
Parameter	Basic information, initial settings	board Display the basic information of the BMS	protection board Display the basic
			information of the BMS
	Complete information, unbundling	Displaying personal information and settings,	Account information, manufacturer
	equipment, instructions for using lithium	instructions for use, and introduction to our	information, etc.
Mine	batteries, instructions for using BMS, about	company, purchase channels, etc.	
	us, exiting the account,		

Note: Due to the upgrade of BMS and the addition of functions, the upgraded version of the Xiaoxiang APP is compatible with our new and old BMS boards. It will be displayed according to the protocol differences of the BMS boards. The interface and functions will be different, which is a normal phenomenon.

# 3. Login Connection-----

#### 3.1 Registering an Account

After the "Xiaoxiang" APP is successfully installed, open the APP, allow the Bluetooth to be turned on, and obtain the location information, the APP will automatically pop up the registration account page, please enter the mobile phone number as required, set the password, and click Confirm.

<b>0</b> *.1 % N 0		<b>8 8 9 1</b> 9:44
Phone n	umber	
Passwo	rd	
	SIGN IN	
	JUMP LOGIN	
Outstan		
Quick reg	Jistration Forg	ot password?

#### **3.2. Bluetooth Connect/Disconnect**

(1) Connect to Bluetooth: After the login is successful, the APP will jump to the Bluetooth list, select the Bluetooth that needs to be connected to connect.

(2) Switch battery: When there are multiple batteries, you can check multiple Bluetooth names in the list, and quickly switch the battery to be connected on the real-time interface

(3) Scan code connection: In the upper right corner of the real-time interface, click the scan code button to connect directly by scanning the barcode of the Bluetooth module

(4) Search for Bluetooth: On the device list page, when there are multiple batteries, you can quickly find the battery that needs to be connected by searching for the Bluetooth name Disconnect Bluetooth: On the device list page, click Disconnect.

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$\leftarrow$	Search Blu	ietooth 🔶	- Q 🖂
Check the c	levice to join the mon status inform	itoring, you can swit nation on the RT pag	ich to view the device le
□	04S028A-L4S-8 C1:37:20:2E:F7	BOA-B-U signal: Wak-82	CONNEC
	Scan cod	e to connec	t
		Со	nnect or
		Dis	sconnect



(5) Guest Mode: When the mobile phone signal in the user's environment is poor or the user needs to skip the account registration, they can choose to use the guest mode. Note that this mode cannot obtain the setting permission because there is no login account. To obtain the setting permission, you must log in to the account. Operation steps: Open the APP, enter the login interface, choose to log in later, the APP will directly enter the user interface.

<	- Sign in
	Phone number
	Password
	SIGN IN
1	
	JUMP LOGIN

#### **3.2.** Real-time interface

1. Capacity information: when static, only the battery SOC percentage and remaining capacity are displayed; when charging, it displays the estimated full time; when discharging, it displays the estimated emptying time.

2. Switch and protection status: the current status of the charge and discharge switch is displayed, when the switch is turned on, it is on, otherwise it is off; the balance status display, the balance is turned on, it is on, and vice versa; the protection status display, when the protection board triggers the protection threshold or manual control Charge and discharge, protection status display corresponding protection status, display OFF when the protection status is not triggered.

3. Battery information: total voltage, current, power, maximum single-cell voltage, minimum singlecell voltage, average voltage, voltage difference, number of cycles, read or calculated through the protection board, and the above data is displayed on the APP.

4. Temperature and humidity: MOS temperature is the ambient temperature of the protection board, others are the external NTC temperature, and the temperature of the battery cell is detected; the humidity is the ambient humidity, which can only be displayed when a humidity probe is installed.

5. Single string voltage: single string cell voltage, the protection board collects cell information, the highest voltage is displayed in green, the middle value is displayed in blue, and the lowest voltage is displayed in gray.



### 3.4 Control interface

Charge and discharge switch: Through the APP, you can directly control the charge and discharge switch to open or close, and control the charging/discharging of the battery.



#### 3.5 Parameter interface

Charge and discharge switch: Through the APP, you can directly control the charge and discharge switch to open or close, and control the charging/discharging of the battery.

Primary information	Secondary information	Example	
	Bluetooth name	Xiaoxiangbms,can be modified	
	Serial No.	According to customer needs, can be modified	
	Bar code	can be modified according to customer needs	
	Battery model	can be modified according to customer needs	
	BMS version number 30	read BMS version, cannot be modified	
Basic information	BMS model	SP17S003, read cannot be modified	
	Production date	2022-3-24, read and cannot be modified	
	BMS address	24 digits, read and cannot be modified	
	Rated charging current	20.0A, read cannot be modified	
	Rated charging current	20.0A, read cannot be modified	
	Rated discharge current	19.0A, read cannot be modified	
Initial setting	Nominal capacity	10000mAH, can be modified	
	Cycle capacity	8000mAH, can be modified	

#### 3.6 Mine Interface: Interface introduction

Primary information	Secondary information	Example
Complete information	Mobile	Mobile number
	Email	Email account
Bound device	Bluetooth list	Unbound device
Lithium battery notice	Web link	Web link
Instructions for using BMS	Web Link	Web Link
Sign out of account	Sign out of current account	Sign out



History Control RT Parameter Mine

#### **3.7 Binding/Unbinding Devices**

1. Binding the device: When connecting to Bluetooth for the first time, the APP will automatically pop up a dialog box to prompt: whether to bind this device, click OK to bind it; to obtain the setting permission, you need background consent before you can modify the parameters.

Unbinding a device: Enter the My interface, select the device that needs to be unbound, and click

Unbind. One account can be bound to multiple devices

#### 3.8 Reset password.7 Binding/Unbinding Devices

When you forget your login password, you can reset a new password through your email. The operation steps are as follows:

1. Open the login interface, find the forgot password, click it and the reset password interface will pop up;

2. Enter the corresponding binding email and click Send Verification Code. Generally, you will receive the verification code within 60S, pay attention to open the mailbox to check; Enter the verification code, set a new password, and finally click OK.

### 4. Services------

#### Scope of service

1. Support APP name and logo modification, customized according to customer needs;

2. Support Google, APP store store applications;

3. Support operation interface design, 100% meet customer needs;

Support for adding custom functions, and function implementation solutions are provided

#### APP use flow chart

